AMENDMENTS TO THE CLAIMS

Please amend the claims as follows.

1. (Currently Amended) A method for tracing an instrumented program, comprising:

   registering an instrumentation provider with a tracing framework;

   associating [[an]] the instrumentation provider with a trace point to provide a probe in the instrumented program;

   selectively enabling the probe to obtain an enabled probe,

   ~~wherein enabling the probe includes defining an action to perform when the enabled probe is fired~~

   wherein enabling the probe comprises assuring that control flow is transferred to the tracing framework when the enabled probe is fired, and

   wherein enabling the probe is performed using a mechanism specific to the instrumentation provider;

   firing the enabled probe during execution of the instrumented program;

   transferring control flow to the tracing framework when the enabled probe is fired, wherein transferring control flow to the tracing framework is performed using the mechanism specific to the instrumentation provider; and

   performing [[the]] an action associated with the probe ~~when the enabled probe is fired~~, wherein the action is performed by [[a]] the tracing framework when control flow is transferred to the tracing framework.

2. (Original) The method of claim 1, further comprising:

   receiving a request from a tracing consumer to selectively enable the probe.

3. (Original) The method of claim 2, wherein the request comprises a tuple having a name component, a module component, a function component, and a name component.

4. (Original) The method of claim 1, further comprising:

   disabling the enabled probe if no tracing consumer is requesting the enabled probe.

5. (Original) The method of claim 1, further comprising:

    removing the probe when the instrumentation provider that provided the probe is unregistered.

6. (Original) The method of claim 1, wherein associating the instrumentation provider with the trace point comprises:

    determining whether the probe is currently provided at the trace point;

    requesting the tracing framework to create the probe if the probe is not currently provided at the trace point; and

    generating a probe identifier associated with the probe.

7-9. (Cancelled)

10. (Currently Amended) The method of claim [[8]] 1, wherein ~~the call into~~ transferring control flow to the tracing framework comprises calling the tracing framework using a probe identifier associated with the enabled probe.

11. (Currently Amended) A system for tracing an instrumented program having a trace point, comprising:

    a processor;

    a memory associated with the processor;

    a tracing framework resident in the memory and executing under control of the processor;

    an instrumentation provider resident in the memory and executing under control of the processor; and

    a tracing consumer resident in the memory and executing under control of the processor,

    wherein [[an]] the instrumentation provider is configured to associate the trace point to a probe and to enable the probe,

        wherein enabling the probe comprises assuring that control flow is transferred to the tracing framework when the enabled probe is fired, and

        wherein enabling the probe is performed using a mechanism specific to the instrumentation provider[[;]].

wherein [[a]] the tracing consumer is configured to request that the probe be enabled, wherein the request defines an action to perform when the enabled probe is fired[[;]], and

wherein [[a]] the tracing framework is configured to:

register the instrumentation provider,

forward the request to the instrumentation provider, and ~~configured to~~

perform the action, ~~if the probe is enabled~~ wherein the action is performed when control flow is transferred to the tracing framework using the mechanism specific to the instrumentation provider.

12. (Original) The system of claim 11, wherein the tracing framework is further configured to create the probe.

13. (Original) The system of claim 12, wherein creating the probe comprises assigning a probe identifier to the probe.

14. (Original) The system of claim 11, wherein associating the trace point to the probe comprises:

determining whether the probe is currently provided at the trace point;

requesting the tracing framework to create the probe if the probe is not currently provided at the trace point; and

generating a probe identifier associated with the probe.

15. (Original) The system of claim 11, wherein the request comprises a tuple having a name component, a module component, a function component, and a name component.

16. (Cancelled)

17. (Original) The system of claim 16, wherein the tracing framework is provided with a probe identifier when the probe is fired.

18. (Cancelled)

19. (Original) The system of claim 11, wherein the tracing framework is configured to unregister the instrumentation provider when the instrumentation provider is unloaded.

20. (Currently Amended) A network system having a plurality of nodes, comprising:

an instrumented program having a trace point;

a tracing framework;

a tracing consumer; and

an instrumentation provider configured to associate the trace point to a probe and to enable the probe,

wherein enabling the probe comprises assuring that control flow is transferred to the tracing framework when the enabled probe is fired, and

wherein enabling the probe is performed using a mechanism specific to the instrumentation provider[[;]],

wherein [[a]] the tracing consumer is configured to request that the probe be enabled, wherein the request defines an action to perform when the enabled probe is fired[[; and]],

wherein [[a]] the tracing framework is configured to:

register the instrumentation provider,

forward the request to the instrumentation provider, and ~~configured to~~

perform the action, ~~if the probe is enabled~~ wherein the action is performed when control flow is transferred to the tracing framework using the mechanism specific to the instrumentation provider,

wherein the instrumented program resides on any node of the plurality of nodes,

wherein the instrumentation provider resides on any node of the plurality of nodes,

wherein the tracing consumer resides on any node of the plurality of nodes, and

wherein the tracing framework resides on any node of the plurality of nodes.

21. (Cancelled)

22. (New) A computer storage device comprising instructions for enabling a computer system, under control of a processor, to perform a method for tracing an instrumented program, wherein the method comprises:

    registering an instrumentation provider with a tracing framework;

    associating the instrumentation provider with a trace point to provide a probe in the instrumented program;

    selectively enabling the probe to obtain an enabled probe,

        wherein enabling the probe comprises assuring that control flow is transferred to the tracing framework when the enabled probe is fired, and

        wherein enabling the probe is performed using a mechanism specific to the instrumentation provider;

    firing the enabled probe during execution of the instrumented program;

    transferring control flow to the tracing framework when the enabled probe is fired, wherein transferring control flow to the tracing framework is performed using the mechanism specific to the instrumentation provider; and

    performing an action associated with the probe, wherein the action is performed by the tracing framework when control flow is transferred to the tracing framework.

23. (New) The method of claim 1, wherein the probe is enabled for a plurality of multiplexed tracing consumers, wherein different actions are associated with the probe for each of the plurality of multiplexed tracing consumers.

24. (New) The method of claim 1, wherein the instrumentation provider is a dynamic module, and wherein registering the instrumentation provider is performed when the tracing framework is already loaded.